

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

1. (Previously Presented) A semiconductor device including a gate having a gate insulation film and a gate electrode, a source, and a drain, said semiconductor device comprising:

a sidewall film covering contacting a side surface of said gate; and

a low permittivity region locally provided at a lower portion of the side surface of said gate with the low permittivity region being covered by said sidewall film,

wherein said gate insulation film and a lower end of said gate electrode have a same width as each other;

wherein said low permittivity region is made of a lower permittivity material as compared to said sidewall film;

wherein said sidewall film includes;

a first film directly formed at an upper portion of said side surface of said gate, and

a second film formed on said first film to directly contact said low permittivity region directly formed at the lower portion of the side surface of said gate;

wherein said gate electrode has a nearly rectangular shaped section.

2-12. (Cancelled).

13. (Currently Amended) A semiconductor device including a gate having a gate insulation film and a gate electrode, a source, and a drain, said semiconductor device comprising:

a sidewall film contacting a side surface of said gate; and

a low permittivity region locally provided at a lower portion of the side surface of said gate with the low permittivity region being covered by said sidewall film,

wherein said gate insulation film and a lower end of said gate electrode have a same width as each other;

wherein said low permittivity region is a cavity;

wherein said sidewall film includes

a first film directly formed only at an upper portion of said side surface of said gate, and

a third film covering said first film, to form the cavity only at a lower portion of said side surface, said cavity formed to directly contact ~~both sides of~~ a lower portion of said gate; and

wherein said gate electrode has a nearly rectangular shaped section.

14. (Previously Presented) A semiconductor device including a gate having a gate insulation film and a gate electrode, a source, and a drain, said semiconductor device comprising:

a sidewall film contacting a side surface of said gate; and

a low permittivity region locally provided at a lower portion of the side surface of said gate with the low permittivity region being covered by said sidewall film,

wherein said gate insulation film and a lower end of said gate electrode have a same width as each other;

wherein a part of a side wall lower portion of said gate is removed to have said low permittivity region formed into a notched shape.

15. (Previously Presented) The semiconductor device according to claim 14, wherein said low permittivity region is made of a lower permittivity material as compared to said sidewall film.

Amendment under 37 C.F.R. §1.111
Serial No. 10/604,891
Attorney Docket No. 031032

16. (Previously Presented) The semiconductor device according to claim 14, wherein said low permittivity region is a cavity.